

REMARKS

In view of the above amendments and following remarks, reconsideration of the rejections raised by the Examiner in the Office Action of June 19, 2007 is respectfully requested.

In the Office Action, the Examiner objected to claim 6 because of an informality, which has been corrected above. The Examiner is thanked for pointing this matter out.

In section 3 on page 2 of the Office Action, the Examiner rejected claims 6, 7 and 11 as being anticipated by JP 63-80021. This rejection by the Examiner is respectfully traversed as being incorrect.

In the rejection set forth in section 3 on page 2 of the Office Action, the Examiner takes the position that JP '021 has a plate 2 having a plurality of holes installed between two protrusions, the plate having one end thereof "fixed to one of said protrusions (near 9) and another end thereof which is left unfixed . . . an impingement-cooling plate is fixed at one end thereof in a cantilever state (near 9) adjacent to an outlet portion of said transition piece on a gas turbine inside diameter side of said transition piece, said impingement cooling plate having an other end which is not fixed (near 3') and forms a gap with said transition piece; and a seal 3' seals said gap . . . said seal comprising an elastic plate." The illustration which the Examiner helpfully provides has been labeled to indicate the fixed/cantilevered end of Fig. 6 of JP '021, at 9, and the allegedly unfixed end 3'.

However, referring to JP '021, the following excerpts establish that, according to JP 63-80021, the cooling cover 2 is fixed at both ends thereof. This will be understood from the following passages:

1. Page 2 of JP '021, a lower-left block, last seven lines to lower-right block, first two lines:

"hereinafter, an embodiment of the present invention will be described with reference to Fig. 1 . . . the cooling cover 2 is, at one end, joined and, at the other end, fitted into a groove formed in a mortise portion 9 of the transition piece 1." (Emphasis added.)

2. Page 3, upper-left block, lines 2-5:

"Fig. 4 shows an embodiment different from the one described above . . . the cooling cover 2 is, at one end, joined and, at the other end, fitted into a groove formed in a mortise portion 9 of the transition piece 1." (Emphasis added.)

3. Page 3, upper-left block, lines 7-11:

"Fig. 5 shows still another embodiment. In a connection base 10 joined to the transition piece, a mortise portion 9 is provided, and into this mortise portion 9, the cooling cover 2 is fitted. At the other end, the cooling cover 2 is joined to a joint portion 7 near the transition piece exit 6, and further outside, a shield plate 3 is joined directly to the transition piece." (Emphasis added.)

4. Page 3, upper-left block, lines 12-17:

"As another structure in which space is secured between the cooling cover 2 and the shield plate 3 to slow down the flow of air in that space, it is also possible to adopt a structure in which, as in the embodiment shown in Fig. 6, an end of the shield plate 3' is bent so as to approach the cooling cover 2, and an air hole 11 is formed in the shield plate 3' so that only the air flowing through the cooling hole 4 flows through the air hole 11." (Emphasis added.)

From the above citations, it becomes clear that JP '021 discloses, in connection with the embodiments that are shown in Figs. 1, 4 and 5, that the cooling cover is fixed at both ends, either by being fitted in mortise portion 9 or joined. There is no disclosure or suggestion of an end being unfixed.

Fig. 6 illustrates a modified example of the third embodiment described with respect to Fig. 5. This is the figure that is being incorporated by the Examiner into the Office Action. Here, an end

of the shield plate 3' shown in Fig. 6 is bent so that a space is secured between the shield plate 3' and the cooling cover 2. This helps to slow down the flow of air in that space. The bent end of the shield plate 3' is simply described as being bent so as to "approach" the cooling cover 2.

That is, the end of the shield plate 3' in Fig. 6 is bent, not for the purpose of supporting the cooling cover 2, but for the purpose of securing a space. Thus, the cooling cover 2 is not supported by the shield plate 3', but is fixed at both ends thereof.

The Examiner asserts that in JP '021 "the right end cannot be fixed, due to the presence of shield plate 3' which would block any further fixing steps from occurring."

However, the Examiner's conclusion that the right end cannot be fixed is not supported by the evidence of record. Indeed, if the shield plate 3' is joined first, it might be impossible to join the cooling cover 2 afterwards. On the other hand, if the shield plate 3' is joined first, then it would be impossible even to fit the cooling cover 2 in so as to attach it to the transition piece. Accordingly, it is respectfully submitted that the only logical conclusion is that first the cooling cover 2 is joined to the transition piece, and then the shield plate 3' is joined to the transition piece. This is in fact supported by the description of the embodiment of Fig. 5, of which the embodiment of Fig. 6 is a variation, in which it is stated that the "shield plate 3 is joined directly to the transition piece."

It is further noted that the Examiner's position is not properly supported by the evidence of record. There is in fact an insufficient basis to conclude that one end is left unfixed. Certainly, as discussed above, fixation could occur, and it appears the most logical conclusion from the discussion of JP '021. JP '021 states in the description of Fig. 5 that the cooling cover 2, is fitted at one end, and joined at the other, so it is possible, thus, to fix the cooling cover 2 at both ends, and then attach the shield plate 3'. By modifying the shield plate 3 of Fig. 5 into the shield plate 3' with a bent end, the structure that is shown in Fig. 6 is obtained. Thus, in Fig. 6, just as in Fig. 5, it is certainly possible to fix the cooling cover 2 at both ends, and then attach the shield plate 3'. This is what is reasonably suggested by the reference.

The Examiner further cited JP '021 as rendering claims 6, 7 and 11 as obvious. The Examiner stated that, ultimately, it would have been obvious to one of ordinary skill in the art to have an unfixed end "due to the presence of the seal plate 3' blocking fixing of the right end."

However, it does not block the fixation of the right end if it is attached afterward, as discussed above. Further, this is what is suggested by JP '021.

The Examiner further stated that the seal 3' is inherently an elastic plate. However, this is unsupported. As discussed, the point of the plate is to form a space. There does not appear to be any indication that it is elastic, nor, even, that its purpose is to seal. Nor is there any recognition of a thermal expansion being a problem with respect to the plate 3'.

The Examiner also rejected these same claims using JP 2003-065071 (JP '071) as a base reference. The Examiner acknowledges that this reference does not teach that only end is fixed or cantilevered at the other end is not fixed, or an elastic seal plate. However, the Examiner refers to JP '021. However, this reference has been discussed above, and it is respectfully submitted to be, at this point, clear that the combination would not have rendered claims 6, 7 or 11 obvious.

Alternately, the Examiner cites JP '328 (JP 62-288328). The Examiner states that this reference teaches an impingement cover plate 2 having holes 4 with one end that is fixed or cantilevered, at 4, and the other end which is not fixed, at 3.

However, in JP '328, the end that is at the right side by exit frame 3, is fitted in. As discussed in the previous response, accordingly, this end is fixed, similarly to JP '021.

The Examiner takes the position that it would have been obvious to make one end unfixed "to lower the heat transfer rate on the impingement plate and/or reduce the thermal stresses." However, this is hindsight reasoning in view of what Applicants have done, and is not based upon what is contained within the references or reasons apparently to one of ordinary skill in the art.

The Examiner emphasizes that in JP '328, Applicants' arguments are misdirected because the reference teaches that the end with the bellows "is slidably insertable in the tail pipe." However, this statement does not negate the fixation of the end. The fact is, because the end is inserted, it is in effect fixed in position. Certainly, it cannot move in a direction perpendicular to the flow direction, and there is no indication that it can move in any other direction. Simply because it has been slidably inserted into its joint does not mean that it is unfixed.

For the reasons set forth above, it is respectfully submitted that the Examiner's rejections of independent claims 6, 7 and 11 are in error, and should be withdrawn. Withdrawal of the rejection, and allowance of the application as a whole, is thus respectfully requested.

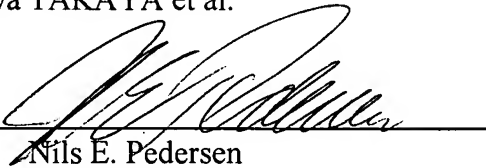
Further references were cited against dependent claims 8, 9 and 10. While Applicants do not acquiesce to the positions taken by the Examiner, further discussion of differences between the dependent claims and the additional references cited by the Examiner is not warranted at this time in view of the clear distinctions between independent claims 6, 7 and 11 and the above-discussed references.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance, and the Examiner is requested to pass the case to issue. If the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact Applicants' undersigned representative.

Respectfully submitted,

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